AMENDMENTS TO THE CLAIMS

1. (Previously Presented) A method of debugging an application program from a workstation, wherein the application program and a debugger program reside on a server that is remote from the workstation, the method comprising:

executing a web browser at the workstation;

invoking the application program and the debugger program using a user interface provided by the web browser and via a network interface to cause the server to execute the application program and the debugger program;

receiving a first web page from the server for displaying a user frame in the web browser at the workstation;

displaying the user frame of the first web page in the web browser at the workstation, wherein the user frame includes information generated by the application program;

displaying a debug view option in the web browser at the workstation for generating a second web page having a debug frame of the application program;

receiving the second web page from the server for displaying the debug frame in the web browser at the workstation when the debug view option is selected; and

displaying the debug frame of the second web page in the web browser at the workstation, wherein the debug frame includes information about one or more components of the application program.

2. (Original) The method of Claim 1 further comprising:

providing a user view option at the workstation for generating the user frame; and

displaying the user frame when the user view option is selected.

3. (Previously Presented) The method of Claim 1 wherein displaying the debug frame of the second web page in the web browser at the workstation includes providing a list of variable names in the application program.

4. (Previously Presented) The method of Claim 3 wherein displaying the debug frame of the second web page in the web browser at the workstation includes providing at

least one of: a list of request information variable names in the application program, or a list of session information variable names in the application program.

5. (Original) The method of Claim 3, wherein one or more of the variable names represents a corresponding object, the method further comprising:

selecting one of the variable names; and

providing information about the object corresponding to the variable name on the debug frame.

6. (Original) The method of Claim 5 wherein the information about the object includes at least one of: the fields of the object, the methods associated with the object, or the constructors associated with the object.

7. (Original) A computer readable storage media comprising:

computer instructions to implement the method of claim 1.

8. Canceled.

9. (Previously Presented) A method of debugging an application program from a workstation, wherein the application program and a debugger program reside on a server that is remote from the workstation, the method comprising:

executing the application program and the debugger program on the server when the application program is invoked from the workstation;

generating information for a first web page, wherein the first web page comprises a user frame that includes information generated by the application program;

transmitting the first web page to the workstation;

generating information for a second web page, wherein the second web page comprises a debug frame when a debug view option is selected from the workstation, wherein the debug frame includes information about components of the application program; and

transmitting the second web page to the workstation.

10. (Previously Presented) The method of Claim 9 wherein generating information for second web page includes saving the information for the user frame when the debug view option is selected.

11. (Original) The method of Claim 10 further comprising restoring the saved information for the user frame when a user view option is selected at the workstation.

12. (Previously Presented) The method of Claim 9 wherein generating information for the second web page includes generating a list of components of the application program.

13. (Previously Presented) The method of Claim 9 wherein generating information for the second web page includes generating at least one of: a list of variables in the application program, a list of methods associated with one or more of the variables in the application program, or a list of constructors associated with one or more of the variables in the application program.

14. (Previously Presented) The method of Claim 9 wherein generating information for the second web page includes using reflection technology to generate at least one of: a list of variables in the application program, a list of methods associated with one or more of the variables, and a list of constructors associated with one or more of the variables.

15. (Original) A computer readable storage media comprising:
computer instructions to implement the method of claim 9.

16. Canceled.
computer instructions to implement the method of claim 9.

17. (Currently Amended) ~~An apparatus for~~ A workstation that is operable to support debugging an application program from [[a]] the workstation, wherein the application program and a debugger program reside on a server that is remote from the workstation, the ~~method~~ workstation comprising:

a processor and a memory coupled to the processor, wherein the workstation is configured for:

~~means for~~ executing a web browser at the workstation;

~~means for~~ invoking the application program and the debugger program using a user interface provided by the web browser and to cause the server to execute the application program and the debugger program;

~~means for~~ receiving a first web page from the server for displaying a user frame in the web browser at the workstation;

~~means for~~ presenting the user frame of the first web page in the web browser at the workstation, wherein the user frame [[that]] includes information generated by the application program;

~~means for~~ presenting a debug view option in the web browser at the workstation to generate a second web page having a debug frame of the application program;

~~means for~~ receiving the second web page from the server for displaying the debug frame in the web browser at the workstation when the debug view option is selected; and

~~means for~~ presenting the debug frame of the second web page in the web browser at the workstation when the debug view option is selected, wherein the debug frame includes information about one or more components of the application program.

18. (Currently Amended) The ~~apparatus~~ workstation of Claim 17 further comprising:

means for presenting a user view option at the workstation for generating the user frame; and

means for presenting the user frame when the user view option is selected.

19. (Currently Amended) The ~~apparatus~~ workstation of Claim 17 wherein the debug frame of the second web page in the web browser at the workstation includes a list of components of the application program.

20. (Currently Amended) The ~~apparatus~~ workstation of Claim 17, wherein one or more of the components represents a corresponding object, the apparatus further comprising:

means for selecting one of the objects; and

means for presenting information about the selected object, wherein the information about the object includes at least one of: the name of the object, the fields of the object, the methods associated with the object, or the constructors associated with the object.

21. (Currently Amended) ~~An apparatus~~ A tangible, computer readable medium comprising code stored thereon for supporting debugging of an application program from a workstation, wherein the application program and a debugger program reside on a server that is remote from the workstation, wherein the code is executable by a processor for ~~the method comprising~~:

~~means for~~ executing the application program and the debugger program on the server when the application program is invoked from the workstation;

~~means for~~ generating information for a first web page, wherein the first web page comprises a user frame that includes information generated by the application program; and

~~means for~~ generating information for a second web page, wherein the second web page comprises a debug frame when a debug view option is selected from the workstation, wherein the debug frame includes information about components of the application program.

22. (Currently Amended) The ~~apparatus~~ tangible, computer readable medium of Claim 21 ~~further comprising means~~ wherein the code is further executable by the processor for saving the information for the user frame when the debug view option is selected.

23. (Currently Amended) The ~~apparatus~~ tangible, computer readable medium of Claim 22 ~~further comprising means~~ wherein the code is further executable by the processor for restoring the saved information for the user frame when a user view option is selected at the workstation.

24. (Currently Amended) The ~~apparatus~~ tangible, computer readable medium workstation of Claim 21 ~~further comprising means~~ wherein the code is further executable by the processor for generating a list of objects in the application program.

25. (Currently Amended) The ~~apparatus~~ tangible, computer readable medium workstation of Claim 24 wherein the [[means]] code for generating a list of objects in the application program includes at least one of: [[means]] code for generating a list of methods associated with one or more of the objects in the application program, or [[means]] code for generating a list of constructors associated with one or more of the objects in the application program.

26. (Currently Amended) The ~~apparatus~~ tangible, computer readable medium workstation of Claim 24 ~~further comprising means~~ wherein the code is further executable by the processor for using reflection technology to generate at least one of: a list of objects in the application program, a list of methods associated with one or more of the objects, and a list of constructors associated with one or more of the objects.

27. (Currently Amended) The ~~apparatus~~ tangible, computer readable medium of Claim 24 ~~further comprising:~~ wherein the code is further executable by the processor [[means]] for providing the list of objects to the workstation in a web page when the debug view option is selected at the workstation.

28. (Currently Amended) The ~~apparatus~~ tangible, computer readable medium of Claim 25 ~~further comprising:~~ wherein the code is further executable by the processor [[means]] for providing in a web page at least one of: a list of names of the objects, a list of fields of at least one of the objects, a list of values of at least one of the objects, the list of methods

associated with at least one of the objects, or the list of constructors associated with at least one of the objects.

29. (Currently Amended) A system for debugging an application program from a workstation, wherein the application program and a debugger program reside on a server that is remote from the workstation, the system comprising:

a tangible, computer readable medium having a web browser stored therein, wherein the [[a]] web browser is executable at the workstation and operable to:

interact with a web page displayed by the web browser to allow a user to invoke the application program and the debugger program from the workstation to cause the server to execute the application program and the debugger program;

present a first web page in the web browser, wherein the first web page comprises a user frame that includes information generated by the application program;

present a debug view option to generate a second web page having a debug frame of the application program; and

present the debug frame of the second web page when the debug view option is selected, wherein the debug frame includes information about one or more components of the application program.

30. (Previously Presented) The system of Claim 29 wherein the web browser executable at the workstation is further operable to:

present a user view option at the workstation; and

present the user frame when the user view option is selected.

31. (Original) The system of Claim 29 wherein the debug frame at the workstation includes a list of one of more components of the application program.

32. (Previously Presented) The system of Claim 29 wherein the application program generates instructions and information for displaying the web pages.

33. (Previously Presented) The system of Claim 29 wherein web browser is operable to display graphical user controls to allow the workstation to communicate with the server.

34. (Previously Presented) The system of Claim 31 further wherein the web browser is operable to present a third web page, and the third web page comprises additional information about at least one of the components when the component is selected by the user.

35. (Original) The system of Claim 34, wherein the additional information includes at least one of: the name of the component, the fields of the component, the methods associated with the component, or the constructors associated with the component.

36. (Currently Amended) A server ~~system for~~ that is operable to support debugging of an application program from a workstation, wherein the application program and a debugger program reside on [[a]] the server that is remote from the workstation, the system comprising:

a processor and a memory coupled to the processor, wherein the server is configured for:

~~means for~~ executing the application program and the debugger program on the server when the application program is invoked from the workstation;

~~means for~~ generating information for a first web page, wherein the first web page comprises a user frame that includes information generated by the application program; and

a debugger program operable to generate information for a second web page, wherein the second web page comprises a debug frame when a debug view option is selected from the workstation, wherein the debug frame includes information about components of the application program.

37. (Currently Amended) The ~~system~~ server of Claim 36 wherein the debugger program is operable to save the information for the user frame when the debug view option is selected.

38. (Currently Amended) The ~~system~~ server of Claim 37 wherein the debugger program is operable to restore the saved information for the user frame when a user view option is selected at the workstation.

39. (Currently Amended) The ~~system~~ server of Claim 36 wherein the debugger program is operable to generate a list of objects in the application program.

40. (Currently Amended) The ~~system~~ server of Claim 39 wherein the debugger program is operable to generate in a web page at least one of: a list of methods associated with one or more of the objects in the application program, or a list of constructors associated with one or more of the objects in the application program.

41. (Currently Amended) The ~~system~~ server of Claim 36 wherein the debugger program is operable to use reflection technology to generate at least one of: a list of objects in the application program, a list of methods associated with one or more of the objects, and a list of constructors associated with one or more of the objects.

42. (Currently Amended) The ~~system~~ server of Claim 36 wherein the application program generates instructions and information for displaying the web pages.

43. (Currently Amended) The ~~system~~ server of Claim 36 wherein the server is operable to communicate with a web browser program at the workstation.

44. (Currently Amended) The ~~system~~ server of Claim 36 wherein the application program accesses at least one of: internal code, private code, or public code.